

2004 Water Quality Report

Chippewa Falls Water Department

June 2005

Our Water Quality and What It Means

We're pleased to present you the 2004 Water Quality Report. This annual report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continuously improve the water quality and protect our water resources. We are committed to ensuring the quality of your water. In July a new well was put into service at the West Well Field.

Where Does Our Water Come From?

Chippewa Falls relies exclusively on groundwater from drilled wells for its' municipal water supply. The wells are drilled to a depth between 53' and 97' into a sand and gravel drift formation. The West Well Field has three wells that are located at 100 Tilton Road and 1821 Nelson Road. The East Well Field has six wells and is located at 1350 Pumphouse Road.

A source water assessment is required of all public water supplies. The assessment identifies land areas that contribute water to each system, significant potential contaminant sources within those areas, and the susceptibility of the drinking water system to contamination. This report is available on the Wisconsin DNR web site and can be assessed at: dnr.wi.gov/org/water/dwg/swap/index.htm. Click on "Find an Assessment", type "Chippewa Falls Waterworks" in the NAME box and click FIND.

The City of Chippewa Falls has developed a Wellhead Protection (WHP) Plan. The goal of WHP planning is to control activities within the Zone Of Contribution to a municipal well to prevent contamination of groundwater. Copies of the City's ordinance or the WHP plan are available at our office.

Educational Information

The sources of drinking water, both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-product of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulation that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

Monitoring Results

The Chippewa Falls Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. The table below shows the results of our monitoring for the period of January 1 to December 31, 2004 and any previous detects. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

Substances Detected in Chippewa Falls Water

TEST RESULTS							
Substance (units)	Violation Y/N	Level Detected	Range	Date of Sample (if prior to 2004)	MCLG	MCL	Likely Source of Contamination
Inorganic Contaminants							
Arsenic (ppb)	No	2	0 - 2	04/16/2002	n/a	50	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	No	.021	.000 - .021	04/16/2002	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Copper (ppm)	No	.2000	.0230-.2000	12/04/2002	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	No	4.40	.00-4.40	11/20/2002	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Nitrate (as Nitrogen) (ppm)	No	5.29 (average)	.49-9.60		10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	No	23.40	6.42 - 23.40	04/16/2002	n/a	n/a	n/a
Radioactive Contaminants							
Gross Alpha, Excl. R & U (pCi/l)	No	1.4	.0 - 1.4	07/09/2002	0	15	Erosion of natural deposits
Unregulated Contaminants							
Bromodichloromethane (ppb)	No	1.18(avg)	nd-2.80		n/a	n/a	n/a
Bromoform (ppb)	No	.07(avg)	nd-.58		n/a	n/a	n/a
Chloroform (ppb)	No	2.36(avg)	nd-5.40		n/a	n/a	n/a
Dibromochloromethane (ppb)	No	1.07(avg)	nd-1.80		n/a	n/a	n/a
Sulfate (ppm)	No	8.00	7.00-8.00	4/16/2002	n/a	n/a	n/a
Disinfection Byproducts							
HAA5 (ppb)	No	2(avg)	nd-4		60	60	
Volatile Organic Contaminants							
TTHM (ppb)	No	4.0(avg)	1.3-5.0		80	0	By-product of drinking water chlorination

The following definitions will help you understand terms and abbreviations you might not be familiar with.

Non-Detects (nd) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or **Milligrams per liter (mg/l)** - one part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) - one part per billion corresponds to one minute in 2,000 years or a single penny in \$10,000,000.

Action level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Maximum Contaminant Level (MCL) —The "Maximum Allowed" is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG) - the "goal" is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Picocuries per liter (pCi/l) - a measure of radioactivity

What does this mean?

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

Number of Contaminants Required to be Tested

This table displays the number of contaminants that were required to be tested in the last five years. The CCR may contain up to five years worth of water quality results. If a water system tests annually, or more frequently, the results from the most recent year are shown on the CCR. If testing is done less frequently, the results shown on the CCR are from the past five years.

Contaminant Group	# of Contaminants
Inorganic Contaminants	17
Microbiological Contaminants	2
Radioactive Contaminants	1
Synthetic Organic Contaminants including Pesticides and Herbicides	24
Unregulated Contaminants	33
Volatile Organic Contaminants	21
Disinfection Byproducts	1

Water and Health Nitrates

Nitrates in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Rates

Water—Effective 6/1/98 (Fire Protection 1/1/03)

Meter Size	Qtrly Base	Qtrly Fire Protection
5/8 & 3/4"	\$16.88	\$11.73
1"	\$23.92	\$29.40
1 1/2"	\$39.39	\$58.50
2"	\$61.90	\$94.50
3"	\$126.62	\$177.00
4"	\$196.96	\$294.00
6"	\$393.92	\$588.00
8"	\$619.00	\$939.00
10"	\$844.10	\$1,407.00

Water Volume

Each Quarter	
First 30 CCF	\$1.09 per CCF
Next 970 CCF	\$.95 per CCF
Next 4,000 CCF	\$.81 per CCF
Over 5,000 CCF	\$.50 per CCF

Wastewater—Effective 1/1/02

Base Charge	\$12.59
Usage Charge	\$1.71 per CCF \$2.2861 per Thousand Gallons

Wastewater usage charge breakdown

Operation and Maintenance	\$1.41
Debt Service	.30
Total Charge	\$1.71

Water and wastewater are charged by volume of water through the meter.

7.48 Gallons = 1 Cubic Foot 100 Cubic Feet = 1 CCF



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Contaminants and Drinking Water

“All sources of drinking water are subject to potential contamination by constituents that are naturally occurring or is man made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.”

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency’s **Safe Drinking Water Hotline at 1-800-426-4791**.

MCL’s are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink two liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

Getting Involved

We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled City Council or Board of Public Works Committee meetings. Please call for meeting times, locations and agendas.

Questions or Comments

If you have any questions about this report or concerning your water utility, please contact Connie Freagon, Utility Office Manager at 726-2741 or Rory Olson, Water Supervisor at 720-6981 or email us at utility@ci.chippewa-falls.wi.us.